

Application No. 09/888,667

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (Original) A method of improving image quality, the method comprising:

receiving image data comprising a plurality of color planes, the color planes including at least one black separation and at least one non-black separation, wherein each color separation comprises an array of separation pixels, each separation pixel having at least two states, a first state corresponding to depositing no ink and a second state corresponding to depositing ink;

identifying a stray pixel pattern within the image data, the stray pixel pattern including a stray separation pixel which corresponds to a misplaced dot in a dot pattern; and

modifying the image data corresponding to the stray pixel pattern, the modification of the image data including setting the stray separation pixel to the first state and setting a second separation pixel within the stray pixel pattern to the second state.

2. (Original) The method of claim 1, wherein identifying a stray pixel pattern within the image data identifies one of several predetermined pixel patterns within a first color separation and wherein setting a second separation pixel within the stray pixel pattern to the second state comprises changing the image data in the first color separation to a pixel pattern that results in a dot pattern corresponding to the stray pixel pattern identified.

Application No. 09/888,667

3. (Original) The method of **claim 1**, wherein identifying a stray pixel pattern within the image data identifies one of several predetermined pixel patterns within the black separation and wherein setting a second separation pixel within the stray pixel pattern to the second state comprises setting each of the separation pixels in the non-black separations corresponding to the stray separation pixel to the second state.

4. (Original) The method of **claim 1**, wherein identifying a stray pixel pattern and modifying the image data corresponding to the stray pixel pattern are determined in accordance with

$$K2 = K \& (R1 \mid L1 \mid -((\sim L3 \& \sim L4 \& L5 \& L6) \mid (\sim L2 \& L4 \& (L3 \mid (\sim L3 \& L5)))))$$

$$\text{StrayPixels} = K2 \wedge K$$

$$\begin{aligned} C &= C \mid \text{StrayPixels}; \\ M &= M \mid \text{StrayPixels}; \\ Y &= Y \mid \text{StrayPixels}; \end{aligned}$$

wherein K is an n-bit word of image data for the black separation, $R1$ is the n-bit word of image data left shifted by one pixel, $L1$, $L2$, $L3$, $L4$, $L5$, and $L6$ are the n-bit word of image data right shifted by 1, 2, 3, 4, 5 and 6 pixels, respectively, C , M and Y are the n-bit word of image data for cyan, magenta and yellow separations, \sim is a logical NOT, $\&$ is a logical AND, \mid is a logical OR, and \wedge is an exclusive OR.

Application No. 09/888,667

5. (Original) The method of **claim 1**, wherein identifying a stray pixel pattern within the image data identifies a pixel pattern comprising a pair of non-black pixels separated by a predetermined number of black only pixels and wherein setting a second separation pixel within the stray pixel pattern to the second state comprises setting each of the separation pixels in the non-black separations corresponding to the first black only pixel following the first non-black pixel to the second state.

6. (Original) The method of **claim 5**, wherein setting a second separation pixel within the stray pixel pattern to the second state further comprises setting a non-black separation pixel corresponding to the second black only pixel following the first non-black pixel to the second state.

Application No. 09/888,667

7. (Currently Amended) A method of improving the quality of text output, the method comprising:

receiving image data comprising a plurality of pixels, each pixel having at least two states, a first state corresponding to depositing no ink and a second state corresponding to depositing ink;

identifying a stray pixel pattern within the image data, the stray pixel pattern including a stray pixel corresponding to a misplaced dot in a dot pattern; and

modifying the image data corresponding to the stray pixel pattern to match a second stray pixel pattern, the second stray pixel pattern including a second stray pixel corresponding to a misplaced dot in a dot pattern, the second stray pixel pattern being selected to produce a dot pattern corresponding to the stray pixel pattern, the modifying including setting the stray pixel to the first state and changing a second pixel within the stray pixel pattern from the first state to the second state, the second pixel being selected to produce a dot pattern corresponding to the stray pixel pattern.

8. (Canceled)

9. (Currently Amended) The method according to claim 8~~claim 7~~, wherein the received image data comprises a raster image and the second pixel is adjacent to the stray pixel in the raster image.

10. (Currently Amended) The method according to claim 8~~claim 7~~, wherein the stray pixel pattern includes at least one pattern from 11010, 110010, 1100010 and 11000010.

Application No. 09/888,667

11. (Original) A method of improving image quality, the method comprising:

receiving image data comprising a plurality of color planes, the color planes including a black separation and at least two non-black separations, wherein each color separation comprises an array of separation pixels, each separation pixel having at least two states, a first state corresponding to depositing no ink and a second state corresponding to depositing ink;

identifying a stray pixel pattern within the image data, the stray pixel pattern comprising a pair of non-black separation pixels having a second state separated by a predetermined number of black separation pixels having a second state;

modifying the image data corresponding to the first black separation pixel following the first non-black separation pixel by setting the black separation pixel to the first state and setting the separation pixels for the non-black separations to the second state; and

modifying the image data corresponding to the second black separation following the first non-black pixel by pixel setting a separation pixel for a non-black separation to the second state.

12. (Original) The method of claim 11, wherein the predetermined number of number of black separation pixels having a second state separating the pair of non-black separation pixels is selected from 3 to 7 pixels.